

CLAIM AMENDMENTS

The following is a complete list of claims. The claims below replace all prior versions of the claims in the application. Please amend claims 2 – 7, 10, 11 and 13; and cancel claim 1.

1. Canceled.
2. (Currently Amended) The vessel of claim 7, wherein the pump is operable to generate at least one of the following pressures: 60 psi, less than 60 psi, and more than 60 psi.
3. (Currently Amended) The vessel of claim 7, wherein the chamber is operable to receive the component that has the repair.
4. (Currently Amended) The vessel of claim 7, wherein the chamber is substantially cylindrical.
5. (Currently Amended) The vessel of claim 7, wherein the chamber is substantially cylindrical and includes a chamber diameter of about 20 inches.
6. (Currently Amended) The vessel of claim 7, wherein the chamber is substantially cylindrical and includes a chamber diameter of about 20 inches and a chamber length of about 60 inches.
7. (Currently Amended) A pressure vessel for curing, in the field, a repair to a component made of composite materials, the vessel comprising:
 - a body having a chamber operable to receive the repair to the component;
 - a portal operable to permit a heating element located inside the chamber to be coupled with a power source located outside the chamber that provides power to the heating element, ~~The vessel of claim 1~~ wherein the portal includes an interface operable to releasably couple the heating element with the power source; and -
 - a pump operable to pressurize the chamber.

8. (Original) The vessel of claim 7 wherein the interface is removable from the portal and replaceable with a different interface.
9. (Previously Presented) The vessel of claim 7 wherein the interface is operable to releasably couple the heating element with a control unit that is located outside the chamber and operable to modify the amount of heat generated by the heating element.
10. (Currently Amended) The vessel of claim 7, 4-wherein the vessel further comprises:
 - a first portal operable to permit the heating element to be coupled with the power source;
 - a second portal operable to permit a temperature sensor located inside in the chamber to be coupled with a control unit of the heater that is located outside the chamber and operable to modify the amount of heat generated by the heating element; and
 - a third portal operable to permit another temperature sensor located inside the chamber to be coupled with the control unit.
11. (Currently Amended) The vessel of claim 7, 4-further comprising an entry operable to permit the insertion of the repair into the chamber and the removal of the repair from the chamber.
12. (Previously Presented) The vessel of claim 11 wherein the entry includes a door hingedly coupled with the body and operable to close the entry while the repair cures.
13. (Currently Amended) A system for curing, in the field, a repair to a component made of composite materials, the system comprising:
 - a heater including a heating element operable to heat the repair to a cure temperature; and
 - a pressure vessel including:
 - a body defining a chamber operable to receive the repair and the

heating element;

a portal operable to permit the heating element to be coupled with a power source located outside the chamber that provides power to the heating element, wherein the portal includes an interface operable to releasably couple the heating element with the power source; and

a pump operable to pressurize the chamber.

14. (Original) The system of claim 13 wherein:

the heater includes a control unit located outside the chamber and operable to modify the amount of heat generated by the heating element; and
the portal is operable to permit the heating element to be coupled with the control unit.

15. (Original) The system of claim 13 wherein:

the heater includes at least two temperature sensors located in the chamber, and a control unit located outside the chamber that is operable to monitor the temperatures of the sensors and modify the amount of heat generated by the heating element according to the temperatures of the sensors; and
the portal is operable to permit the temperature sensors to be coupled with the control unit.

16. (Original) The system of claim 13 wherein:

the heater includes at least two temperature sensors located in the chamber, and a control unit located outside the chamber that is operable to monitor the temperatures of the sensors and modify the amount of heat generated by the heating element according to the temperatures of the sensors; and
the vessel includes:

a first portal operable to permit the heating element to be coupled with the power source,

a second portal operable to permit a temperature sensor to be coupled with the control unit,

a third portal operable to permit another temperature sensor to be coupled with the control unit.

17. (Original) The system of claim 13 wherein the pump is located outside the chamber.
18. (Withdrawn) A method for curing, in the field, a repair to a component made of composite materials, the method comprising:
 - inserting the repair into a chamber of a pressure vessel;
 - locating a heating element inside the chamber;
 - pressurizing the chamber to cure the repair ; and
 - heating the repair with the heating element to a cure temperature to cure the repair.
19. (Withdrawn) The method of claim 18 wherein inserting the repair into the chamber of the pressure vessel includes inserting all of the component into the chamber of the pressure vessel.
20. (Withdrawn) The method of claim 18 wherein pressurizing the chamber includes injecting air into the chamber.
21. (Withdrawn) The method of claim 18 wherein locating the heating element inside the chamber includes coupling the heating element with the repair to the composite element.
22. (Withdrawn) The method of claim 18 wherein heating the repair to the composite element includes powering a heating blanket.
23. (Withdrawn) The method of claim 18 further comprising:
 - locating a control unit outside the chamber, and
 - coupling the heating element with the control unit through a portal of the pressure vessel.

24. (Withdrawn) The method of claim 18 further comprising reducing the pressure in the chamber.